IN THE **UNITED STATES** PATENT AND TRADEMARK **OFFICE**

Application Number	09/749,637		
Filing Date	28 December 2000		
First Named Inventor	Baldomero M. OLIVERA		
Group Art Unit	1646		
Examiner Name	unassigned		
Attorney Docket Number	2314-227		

Itle of the Invention: O-SUPERFAMILY CONOTOXIN PEPTIDES

STATEMENT PURSUANT TO 37 CFR 1.821(f)

Assistant Commissioner for Patents Washington, D.C. 20231

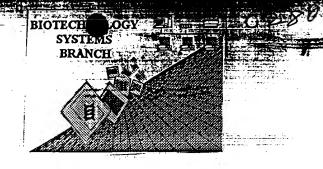
Dear Sir:

In the matter of the above-identified application, Applicants submit herewith a computer disk containing the sequences of the substitute Sequence Listing which is filed concurrently herewith by Preliminary Amendment.

It is hereby certified that the content of the paper and computer copies of said substitute Sequence Listing are identical and include no new matter.

RESPECTFULLY SUBMITTED,								
NAME AND REG. NUMBER	Jeffrey L. Ihnen, Reg. No. 28,957							
SIGNATURE	Jefty Ah			ATE	E 13 AUGUST 2001			
Address ROTHWELL, FIGG, ERNST & MANBECK, pc								
	Suite 701-East, 555 13th Street, N.W.							
City	Washington	State	D.C.	Z	Zip Code	20004		
Country	U.S.A.	Telephone	202-783-6040	$0 \mid F$	Fax	202-783-6031		

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:



Application Serial Number: 09/749, 637

Source: 01PE RECEIVED

01-16-01 : Date Processed by STIC:

AUG 2 0 2001

TECH CENTER 1800 2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUEST ONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 793-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin30help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2Kcompliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money. WARRY CONTRACTOR OF THE WARRY CONTRACTOR

Checker Version 3.0 can be down loaded from the USPTO website at the following address http://www.uspto.goy/web/offices/pac/checker

Note: The initial sequence listing was errored and edited and is included. The edited sequence listing was found to still be errored as OIPE is noted on p.5.

RAW SEQUENCE LISTING

PATENT APPL CATION: US/09/749,637

-DATE: 01/23/2001 :IMF: 12:19:41

Input Set : A:\Cpg.pto

output Set. N:\CRF3\01232001\I749637.raw



Ties APPLICANI: University of Utah Research Loungation Cognetix, Inc. olivera. Baldomero M. Hartier, G. Edward Varking, Maron. म!!!vard, bavid R Mountesh, J. Michael Laver, Richard I. Jones, Robert M.

ELS FILLE OF INVENTION of Supertamics Concresin Poptides

Does No; Combly Corrected Diskette Needed See P. 5

11 - 130 - 111E PÉFERENCI'. 23 1-227 C--> 33 <140> CURRENT APPLICATION NUMBER: US/09/749,637

C--> 33 <141> CURRENT FILING DATE: 2000-12-28

-150 - PRIOR APPLICATION NUMBER: US 60/21 112

to the INTOR FILTIG DAIR LOOM-10-20

se - 150% CRIOR APPLICATION NUMBER: US60,210.440

TO THE ERIOR FILING DATE 1000-07-20

5 159 IPHOR DUPLICATION NUMBERS US 60/174.26.

17 ALGER PREOR FILING DAIR DECOM-06-26

51 - 150 - PRIOR ADMINISTRATION HOUSER: US + 0/173,751

is \$15%; PRIOR PILING DATE: 1999-12-30

57 Clode NUMBER OF SEQ ID NOW: 403

of <170 - SOFTWARF: Patenton version 3.0

65 - 210 - SEQ ID NO: 1

67 - 211> (FNGTH: 261

69 JOIZS TYPE: DNA

77 ×213× ORGANISM: Comus gloriamaris

75 <220> FEATURE:

77 - 221 > NAME/KEY: CDS

79 < 222 > 1.0CA ION: (1)..(231)

83 - 400 - SEQUENCE: 1

by aty and etg acg tgo atg atg a could not guy etg the tig acc gee 85 Not Lys Lou Hr Cys Met Mot rie Val Ald Val Lou Phe Lou Thr Ala 14.

E8 tigg acta the gite and get gut gir gir len gga aut gga atg gag att ett.

69 Trp Th. Phe Val Tar Ala Asp Asp Set Gly Ash Gly Met Glu Ilê Leu 2.5 20

92 ftf coq aaq gog ggt cac gaa alg gag hac etc gaa gto fict aat ogg 144

95 Phe Pro Lys Ala Gly His Glu Met Glu Ash Leu Glu Val Ser Ash Arg 4.0

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9% Val Lys Pro Cys Arg Lys Glu Gly Gln Leu Cys Asp Pro Ile Phè Gln 60 55

98 50 100 aac tgc tgc cgt ggc tgg aat tgc gtt ctt ttc tgc gtc tgaaactacc 24.1

101 Asn Cys Cys Arg Gly Trp Asn Cys Val Leu Phe Cys Val

102 65

261 104 gtgatgtctt ctctccctc

96

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     10 ' <210> SPQ 10 NO: 2
     100 - 211 - 15NGHH: W
     TIT 32125 TYPL: PRI
     113 - 213 - OPGANISM: Comus gloriamaris
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                                             1.11
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     THE ELZY YELD AT
     145 Miss ORMA CH: Councid Geniamaris
     119 Live Pralukas
     151 321 NAMES WITE STILL
     181 1228 100MH S. (1)..(29)
     .TV .23 Mind TM-MMMITON: Was at residues 3 and 13 may be pro or hydrocy-
     19.6 . The bedfuler gamma-carboxy-Glu: Namet residue 22 may be lip
157 or bris -Tip
From Xaa - rosida
     161 400% SIMUENCE: 4
W--> 163 Val Tys Xaa Cys Arg Lys Xaa Cly Gln Leu Cys Asp Xaa Ile Phe Gln
     164 1 5
                                             10
W--> 166 Asn Cys Cys Arg Gly Xaa Asn Cys Val Leu Phe Cys Val
     1007
     169 .210% SLQ ID No: 4
     171 PP115 LENGTH: 29
     173 CT122 TYPE: PET
     175 .13> OPGANISM: Comus gloriamaris
     1^{\frac{1}{17+\alpha}} ...0. FEATUFL:
     18. - 2212 NAME/KEY: SIIL
     18 / 122× TOCATION: (!)..(29)
     185 FIRE OTHER INFORMATion: Xaa at residues 3 and 13 may be pro or hydroxy-
Pio: Xia at iesidu
           e i mar bi Glo or gamma-carboxy-Glu; Xaa at residue 15 may be Tyr
     186
              , 125-1-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-surpho-Tyr or O-phospu
     187
              o-Tyr; Kaa at residue 22 mag be Trp or bromo-Irp
     192 <400> SEQUENCE: 4
W--> 194 Val Lys Xáa Cys Arg Lys Xáa Gly Gln Leu Cys Asp Xáa Ile Xáa Gln
                 Γ',
                                             1.0
     195 L
W--> 197 Asn Cys Cys Arg Gly Xaa Asn Cys Val Leu Phe Cys Val
     200 <210> SEQ ID NO: 5
     202 <211> LENGTH. 29
     204 <212> TYPE: PRT
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RAW SEQUENCE LISTING

TATENT APPLICATION: US/09/749,637

-DATE: 01/23/2001

- !!ML: 12 19:41

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Input Set : A:\Cpg.pto
                     Dut put Sets: N:\CRF3\01232001\1749637.raw
    216 216 ORGANISM: Comus gloriamaris
    Ler -220 IEARURE:
     ILL - 221: NAME KEY: SITE
     114 222 LOCATION: (1)..(29)
     2.6 .223 OTHER INCORMATION: Xia at residues 3 and 13 may be pro or horizon:
graf kaa at resiuu
           e 7 hay be Gir or damma-carboxy-Gir; Xaa at lesidue iz may be tip
    . 17
              or bromo-lip: Xaa at residue 27 may be tyr. 12 -1-lyr. mono-fodo
              -irr diriodo-lyr, o-sulpho-lyr or o-phospho-lyr
     Part - 400 x SEOUTNOIS - o
W--> 225 Val Lys Xáa Cys Arg Lys Xáa Gly Gla Leu Cys Asp Xáa Ile Phe Gln
     ... 45 1
W--> 228 Asn Cys Cys Arg Gly Xaa Asn Cys Val Leu Xáa Cys Val
     3.10
     . NO . 210 SEQ 40 NO: 6
     Discouling LENGTH: 542
     335 EZIZZ TYPE INA
     .41 220% PEAT PEE
     MANE ZZI NAME KEY. CDS
     \pm 15 + 222 - 10CATION (116)..(235)
     1.5 - Abox SECURNOL: 6

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    The map lift tg: gut, mag att it! can auc tgc tgc cat ago ttg tit tgc
    279 Gla iou Cys Asp Pro He Phe Gla Asa Cys Cys His Gly Lea Cae Cys
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    des git fig its the gis tababacture gigasoficit electroses chartaglasta e
    203 val Lou Val Cys Val
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    2006 taggoggong otoraganga tocaagottu ograngogtg catgogaogt catagotoit
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    Pro aggacgogod onglagodgo goathet
    277 - 210 - SEQ ID NO: 7
    2009 - 211 | LENGTH: 30
    781 -212: TYPE: PRT
    283 - 213 - ORGANISM Conus omaria
    287 <400% SEQUENCE 7
    289 Ser lle Arg Met Cys Arg Arg Glu Ala Glu Leu Cys Asp Pro Ile Phe
                5
                                            1 ()
    290 - 1
    193 Gln Asn Cys Cys His Gly Lou Phe Cys Val Leu Val Cys Val
           20
    294
    297 K210> SEQ ID NO: 8
    299 <211> LENGTH: 27
    301 -(212> TYPE: PRT
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RAW SEQUENCE LISTING

FAILNE APPLACATION: US/09/749,637

RAW SEQUENCE LISTING

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- MATE: 0:72372001 - PIME: 12:19:41

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ar . jes ogdANISM: Comus omaria
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     SOUR WILLIAM NAME (KEY: SILE
     +11+222+10 MITON: (1)..(27)
     113 L23 Filek !NickMAllon: Xaa at residue o as dau on damma-carbox, -Gluc Xaa
at residue 11 m.
    and to broom hydroxy-bro
     318 - 1 M. F. EURN, T. 8
W--> 320 Met Cys Arg Arg Xaa Ala Gln Leu Cys Asp Xaa 1le Phe Gln Asn Cys
                                         ( )
     ozine,s Hi di Tou Pho Cys Val Tou Val Cys Va.
     2.
     726 210 SEQ .D NO: 9
     325 Ezil - Mi NG H: 340
     1500 \sim 2.12 < 1 \rm YPF : DNA
     3-2 213 GROANISM Comus teleite
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     153 aga mat gga ata gaq aat alf the dog aag goa ggf dac gae afg gag
     454 Any Alm Ho to , Gle est Loa Phe Pro Lys Ala Gly Hi Glu Met Glo
     55
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     35" aan etn gal gan tot waa dag agg dad dag gag aga dog gad tod god
     The was from the App Sor Lye His Arg His Glo Clu Arg Pro Asp The Di-
                 4 5
                                         50
     361 gad aaa gaa qaq atg dig dta dag aga dag gtd aag dog tyf dgi aaa
                                                                               213
     362 Asp Lys Glu Giu Met Leu Leu Gln Arg Gln Val Lys Pro Cys Arg Lys
                                    6.5
     After dia feat care off that hat city att titl can had the the cost une that
                                                                               291
     *66 Glu His Gln Led Cys Asplica Tie Phe Gln Ash Cys Cys Arg Gly Trp
     3. 0 75
     369 hat the att att only the the act that agency cityathing the classic call
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     TO for Cys Vai Val Len Ser Cys Thr
     377 90
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     573 c
     376 <210> SEQ ID MO: LO
     378 <211> LENGTH: 97
     380 <212> TYPE FRT
     382 <213> ORGANISM: Conus textile
     38€ <400> SEQUENCE: 10
     388 Met Lys Leu Thr Cys Met Met Ile Val Ala Val Leu Phe Leu Thr Ala
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                                            10
     392 Trp Thr Phe Val Thr Ala Asp Asp Ser Arg Asn Gly Met Glu Asn Leu
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                                           RAW SEQUENCE LISTING
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                 Arg His Gin Gid Arg Pro Asp Thr day Asp ris Giu Giu Met Ten Leu
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          and The Bene Girn Ash Cys. Cys. Arg. Sij. Try. Int. Cys. Val. Val. Year Sor. Cos.
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          with all a subblidgers.
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    Fig. 6. of https://doi.org/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.000/10.0000/10.000/10.000/10.000/10.0000/10.000/10.0000/10.000/10.000/10.000/10.000/10.000/10.0000/
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W--> 444 Glm Asn Cys Cys Arg Gly Xaa Xaa Cys Val Val Leu Ser Cys Thr
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          119 <231> LENGTH: 165
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          459 ₹221≥ NAME/KEY: CDS
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          Iff all against and and age may ath off off orders of the too till accession
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          10° Met Lys Leu Thr Cys Leu Met Tile Vol Ala Val Leu Ser Leu Thr Gly
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          171 Frp Thr Pho Val thr Ald Asp Asp Ser Gly Ash Gly Leu Gly Ash Lea
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          474 iff log aat one cat cac gaa alg aag aac coo gaa goo tot aaa tig
          475 Phe Ser Asn Ala His His Glu Met Lys Asn Pro Glu Ala Ser Lys Leu
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                 35 40
                                                                                                                                                               192
         478 aan aag agg ton git noa noorgag genont tigt aat tigg nit ana naa
         479 Ash Lys Ard Cys Val Pro His Glu Gly Pro Cys Ash Trp Lou Thr Gln
                                                                  55
                                                                                                           60
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

75

482 aac tgc tgc agt ggt taf aat tgc afc att tit ttc tgc ctaf

483 Asn Cys Cys Ser Gly Tyr Asn Cys Ile Ile Phe Phe Cys Leu

70

234

EVITENT APPLICATION: US/09/749,637

DATE: "IZ.372004 TIME: I.:17:42

Imput Set : A:\Cpg.pto

output Set: N:\CRF3\01232001\1749637.raw

1:3 M:2/13: Carrent Application Number differs. Replaced Jarrent Application No. in a Milet Co Corrent France Date differs, Replaced Current Filling Date .:.of H:341 k: (46) "n" or "{aa" used, for SEQ HD# > 1::00 M: (4) h: (46) "n" or "Kaa" used, for SEQ The 3 file, M 311 w: 46; "n" or "Naa" used, for SEQ 10: 4 1:191 M 54; A: 146; "n" or " (aa" used, for SED 15: 4 making the weighter "a" or "saa" useds for SLO list light World to the "n" or "Equ" used, for SEQ II was HAND HOME AT A SEC "h" or "Am" meet, for Sig His 8 it is the all Williams "ha" on "Mar" useds for Signification ... 115 M 341 W: Res 'a" of "sta" used, for SEO ID: ... 2: "We wall at the "n' or 'tar" used, for Sto ILa i Lists H sai Wi stor "n" or "Kia" used, for SEO 1D# 14 Line": M 311 ki alto "h" or "Air" used, for SEO HD# 1" litte M 341 Ki (in "n" or "Nim" used, for SEO ID# 1 in 97 Modi wigdon "n" of "Kra" used for SEQ ID* 20 Filler M 441 Willer "F" or "Air" used, for SEQ III 25 1:963 G 341 K: (46: "h" wr "Xi: used, for SEQ 10: 13 tions M (4) William "h" or "him" use L for SEO libe 2: 1980 H Markingdo "m" or "kip" used, for SEQ ID: .: : ";" M ;: W .46. "H" or "Maa" usel, for SEQ 10# ... tilled Hildi Wi (de) "h" or "via" used, for SEC Heriz th" or "Waa" used, for Sec Net. " . 0. H: 4. N: (4. filedad Mr. II wi [46] "c" or "Yaa" us 1. for SEC Howild 1:1971 (1:11 ... 16) in" or "Kaa" used, for SEQ Hit:ZE ':117_ M M' W: 460 "n" or "Kaa" used, for SEQ Me-31 L:1175 H 64° W: 160 "r" or "Kaa" used, for SEQ IDE 51 L:17/7 H (4) F. 16; "E" or "Gaa" used, for SEQ He (6 L:1280 H 341 W: 40 - "n" or "Maa" used, for SD2 H0#:34 LIBRED FILE. In "h" or "Naa" used, for SED ID# 37 1.1471 m [41] M. J., "n" or "Waa" used, for SE, 19# 37 1490 if all by sate "n" or "Maa" used, for SEO 1D# for L:1493 M 541 W. (46) "n" or "Xaa" used, for S%2 He::40 1:1600 M. 201 W: (46) "n" or "Naa" used, for SEO ID# 45 1. 1703 M 341 W - 46 - "n" or "Haa" used, for ShO ID# 44 1. 1706 th 141 kg -46; "n" or "Raa" used, for SEO ID: 16 1. (307 M -41 W (46) "p" or "Xau" used, for SED ID#:39 E 1810 5 441 L (46) "n" or "Xac" used, for SEQ 114 49 £ 1917 M 341 W 746; "n" or "Mak" used, for SEQ 1D# 5. L 1920 M -41 W (46) "n" or "Laa" used, for SEQ ID# 52 I. 1946 M 341 W (46: "n" Ar "Xaa" us-d, for SFQ ID# 53 L 1976 H :41 W : (46) "n" or "Yaa" used, for SEO ID#:54 (46) "n" or "Aaa" used, for SEQ ID#-54 L 1979 M 441 W. L:2079 M 341 W= (46) "n" or "Xaa" used, for SEQ 1D# 57 L-2082 M-341 W: (46) "n" or "Xaa" used, for SEQ ID# 57 L 2181 M:341 W. (46) "n" or "Xaa" used, for SEQ ID# 60 L 2285 M-341 W: (46) "n" or "Xaa" used, for SEQ ID# 63 L:2288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#.63

PATENT APPLICATION: US/09/749,637

-1941F: 01/23/2001 -11MU: 12:19:42

Imput Set : A:\Cpg.pto

Output Set: N:\CRF3\01232001\1749637.raw

1:2388 M:341 W: (46) "n" or "Xaa" used, for SFQ ID#:06 1:2394 B:341 W: (46) "n" or "Xaa" used, for SFQ ID#:06 1:2493 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 1:2496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:09

DATE: 01/16/2001

OIPE

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FIMI: 11:53:39
                     PATENT APPLICATION: US, 09/749,637
                     Imput Set : A:\2314-227.ST25.txt
                     Output Set: N:\CRF3\01162001\I749637.raw
      2 - His Applicant: Culterally of Stab February Foundation
                                                               Does Not Comply
              Coquetis, Inc.
                                                           Corrected Diskette Needed
             olisora, baldomera H.
             ementions d. Edward
             Watkins, March
                                                                  pp 1,2
             Hillyond, Lavid K.
              Metrovsh. J. Michael
             Layer, Richard L.
                                                               There et tak
     10
              Jones, Pobert M.
     1.1
             TITLE OF INVENT. "N: C-Superfamily Const win Peptidos
     The *1.00 FILE PLYERING: Z::4.027
C--> 17 <140> CURRENT APPLICATION NUMBER: US, 09/749, 637
C--> 17 <141> CURRENT FILING DATE: 2000-12-28
     17 - 150% PELOK APPLICATION NUMBER: US 60/21% 112
     20 - 150. PETOP APPLICATION NUMBER: US60/219.440
     J1 - 151 - PRIOR | D.INT DATE: 2000-07-20
     PROLITON DEFOR IMPROVATION NUMBER: US 69/111 203
        151> PRIOF TILING DAIL: 2000-06-26
        1568 PER COPE CALLON NUMBER: US 60/175,754
     27 <151> PRIOR FILING DATE: 1999-12-30
     29 KIGG NUMBER OF SECTION NOS: 409
     31 <1705 SOFTWARD: Patenth, version 3.0
FRRORED SEQUENCES
     959 < 110 > SEQ ID NO 34
     960 < 111 LENGIH: 27
     961 : 1125 TYFE: PRT
     1002 - 213 - ORGANISM: Conus ammiralis
     961 SING> PEATURE:
     96 % CHELL NAME/KEY: SITE
     966 <PRO: TOCATION: (1)..(27)
     567 KILLS OTHER INFORMATION: Kaa at residue 1 may be Irp or bromo-Irp: Xaa at
residues 7 and 1
     963 223> 8 may be Glu or gamma-carboxy-Glu; Xaa at residue 20 may be fyr
     969 (223) 125-191yr, mono-fodo-fyr, di-fodo-fyr, O-sulpho-Tyr or O-phospho-
E--> 970 <223 Tyr
                                  Move
                                               here or place (223) before each
     973 <100> SEQUENCE: 14
E--> 975 Xaa Cys Lys Gla Ser Gly Xaa Met Cys Asn Leu Leu Asp Gln Asn Cys line of the 976 l

W--> 978 Cys Xaa Gly Xaa Cys Ile Val Leu Val Cys Thr
W--> 978 Cys Xaa Gly Xaa C🎠 Ile Val Leu Val Cys Thr
                    20
                                 When a lone amno acid is placed
     8367 - 210> SEQ ID NO: 313
     8368 -211> LENGTH: 26
                                like this and does not have a <223>
     8369 <212> TYPE: PRT
```

file://C:\Crf3\Outhold\VsrI749637.htm picks it up as the first amino in 1/16/01

in front of it, the computer program

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/749,637

DATE: 01/16/2001 11ME: 11:53:40

Input Set : A:\2314-227.ST25.txt

Out.put Set: N:\CRF3\01162001\1749637.raw

E- 9 ...) ROWNISM: Count tessulatus

WHICH BIM HEAFUREE

best kall - NAME/KEY: Sill

Xaa at residues

88% (223) 1 and 17 may be Pro or hydroxy-Pro: Xaa at residue ς may be ryte

ارز (223) المارزية: - Lir. mono-iodo-fyr, Hi-iodo-fyr, o-sulpho-fyr or O-phospho-

E--> 8378 <223 Tyr) --

move to here or place (223) before each

老二十二年(1) (生)对2种(1): (1)为

F--> 8383 Asp Cys Xāa Xaa 61n Xaa Xac Phe Cys Gly Leu Gln Arg Gly Cys Cys 6.554 1

W--> 8386 Xaa Gly Thr Thr Cys Phe Phe Leu Cys Phe 75 " 21.

the explaination

Some error, réfer to p.1.

PATENT APPLICATION: US/09/749,637

DATE: \$171672001 TIME: 11:53:41

input Set : A:\2314-227.ST25.txt

Output Set: N:\CRF3\01162001\1749637.raw

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1:17 H:27e T: Chiront Application Number differs. Replaced Carrent Application No.
Fill Min 1 to Christia Piling Date differs, Replaced Current Filling Date
hithe P: 62 %: (46) h" or "Ga" used, for SEO (D**3
Littl' B: 4, %: 746, "n" or "Aaa" used, for SEQ 1D# 3
this then the (.6. "n" or "Ga" used for SEO (D# )
                     "n" or "Aaa" used, for SEQ D= 4
Lilas Misa wi 640
5:132 M:372 W: 4000 "h" or "Gir" used; ter SEQ ID= 5
Edito M. A. We sie, "h" or "var" used, for SEQ Ha.5
Lille Histi an rese "h" or "see" used for SFQ iD# 8
lista Mist We also "a" or "Ada" used for SEQ "L#. H
licum Histo Ki kae "a" or "Zii" useda tor Jho ID: Ji
ridos Hisda, I. oge "m" or "dar" used for SLQ IDE 13
L-187 M: 341 w: 446 "n" or "Gr:" used, tor SEQ IP# 14
                     "h" of "Ret" used, for SEQ ID: 17
to have Mirit W. . . to
                     "n" or 'Ser' used, for SEQ ID= 1"
  -\alpha = H_1(s) I = V^{(s)} + \epsilon \cdot G
                     "m" or "Kaa" is do for SEQ Art 20
, sur Hill by by, cob-
  com M: Gray: -16 'a' or "der" used, for SEO (D# 20
 688 H. Ali w: 46 "n" or "East" used, for Sho Da 25
1 60 M: M: M: W: - .6 "H" or "Saa" used, ter SED 34 24
  "Tre History was two "a" or "Saa" use 1. for $15 10= 24
 Who gives William "h" or "Maa" used, her SEC (D# 24
   Ma Middle William "he" or "Kaa" tende for Shy 100.27
  THE PERSON WE HAVE
                    "n" or "Ana" as who for Sept the 2"
 Relation to the second
                     ":" or "kea" used: for SLO ibs 25
L 81" M: 41 W: . * -
                     "ti" or "Edg" used, for SEQ (10) 28
L 893 H: 4 - W. (46. "L" or "544" used, for SEQ JD# 31
1 896 M-341 D: :101 "a" of "Kaa" used. for SEQ 10# 31
L 970 M:25. Fo No. of Beq. differs, L 1. 1970 M:25. Fo No. of Beq. differs, L 1. 1970 M:25. Fo No. of Beq. differs, 
L 975 4: 41 W: (16 "a" or "Max" used, for SEQ ID#:0
L 978 E: 24! W: (16, "h" or "Xaa" used, for SEQ ID# 0
T 1956 E :41 b: lot "n" or "Gaa" used, for SEQ TD-:37
1/10/39 F 241 W: .40) "n" or "Vaa" used, for SEQ 10m 37
I. 1!42 M 341 W: [40: "n" or "€1a" used, for SEQ ID# 40
1. 1115 M 541 W: (45) "n" or "Saa" used, for SEO 1D# 40
I. 1929 M. 341 W. , 400 "n" or "Naa" used, for ScO ID# 43
Light to At William "n" or "Ata" used, for SEc Hollie
i 131' Nº 41 W. 1465 "n" or "Xaa" used. for SEQ 104.46
1 (9) to 1! W 40) "n" or "Eaa" used, for SEQ ID# 49
1 1897 N | 11 W | 164 "n" or "Xaa" used, for SFQ 1D#.49
1 1477 H 141 J (40) "n" or "Xwa" used, for SEC 1D#:52
I 1480~\mathrm{M} 541~\mathrm{W} \sqrt{16} "n" or "Xaa" used, for SEQ 10^{\#}\cdot52
                (46) "n" or "Naa" used, for SEQ Ho#:53
1.1497 H .41 W
L:15:8 M: 41 W: :46; "n" or "kaa" used, for SEQ [D#.54
                (46) "n" or "Xaa" used, for SEQ ID#:54
L-1521 M :41 W
1. 1598 M (41 W. 746) "n" or ">aa" used, for SEQ ID#:57
                746) "n" or "Xaa" used, for SEQ ID#:57
1. 1601 M /41 W
i. 1677 M 541 W. (46) "n" or "Xaa" used, for SEQ ID#:60
L.1758 M 541 W (46) "n" or "Xaa" used, for SEQ ID#:63
```

PATENT APPLICATION: US/09/749,637

iwhi i/le/2561 HML linkin

Input Set : A:\2314-227.ST25.txt

(mupuk Set: N:\CRF3\01162001\1749637.raw

1::76' M:34: W: (46) "L" or "Xaa" used for SFC Herr?
L::75 H:54: W: (46) "L" or "Xaa" used for SFC Herr?
L::84! M:54! W: (46) "L" or "Xaa" used for SFC Herr.
L::84! M:71! W: (46) "L" or "Xaa" used for SFC Herr.
L::5578 M:25: L: No. of Seq. differs - wirel WGiH:inpetion is GH: 3.1 for